

Quarterly Technical Report
Treatment System Discharge Permit
City of Santa Rosa
Subregional Water Reclamation System
Industrial Waste Section
February 2006 to April 2006

A&M MINI-MART 440 HEARN AVENUE SANTA ROSA, CALIFORNIA

Project 2433

April 21, 2006

Prepared for

Mr. Michael M. Gholami 440 Hearn Avenue Santa Rosa, California 95407

Prepared by

SOMA Environmental Engineering, Inc. 6620 Owens Drive, Suite A Pleasanton, California 94588

Certification

SOMA Environmental Engineering, Inc., has prepared this report on behalf of Mr. Michael M. Gholami, the owner of A&M Mini-Mart located at 440 Hearn Avenue, Santa Rosa, California, to comply with the City of Santa Rosa's groundwater discharge permit's requirements for February 2006 to April 2006.

Mansour Sepehr, Ph.D., P.E. Principal Hydrogeologist



Mr. Chris Murray Subregional Water Reclamation System Industrial Waste Section 4300 Llano Road Santa Rosa, CA 95407

Re: Wastewater Discharge Permit Number SR-GW6493

A & M Minimart, 440 Hearn Avenue, Santa Rosa, California

Dear Mr. Murray:

This report details the operation and maintenance that was performed on the groundwater remediation system at the above referenced site from February 2006 to April 2006. The site vicinity map is presented in Figure 1.

Site Background

The groundwater extraction system consists of a French drain and three groundwater extraction wells. The French drain was installed within the A-Zone, at a depth of approximately 16 to 17 feet below ground surface (bgs); the extraction wells were installed within the deeper B1-Zone, at a depth of approximately 43 to 47 feet bgs. The impacted groundwater that is extracted from the site is treated using granular activated carbon prior to its discharge into the City of Santa Rosa's sewer system.

On May 27, 2004, SOMA filed an application with the City of Santa Rosa to begin discharging the treated groundwater into the site's sewer system. The discharge permit is included as Appendix A. On January 26, 2005, the treatment system was started.

The location of the treatment system is displayed in Figure 2. A schematic diagram of the treatment system is illustrated in Figure 3.

To ensure its safe and proper operation, SOMA has monitored the system on a weekly basis. SOMA has also collected grab groundwater samples from the system's influent (influent from the French drain and influent from the extraction wells), as well as the effluent of the 2,000-pound carbon vessel (GAC-1) and the system's effluent. The analytical results from the system's influent are used to determine the mass removal rates of total petroleum hydrocarbons as gasoline (TPH-g), Methyl tertiary Butyl Ether (MtBE), and benzene from the groundwater. The analytical results collected from the system's effluent and GAC-1 sample

ports are used to verify that the system remained in compliance with the discharge permit's conditions.

Treatment System Operation

As of April 7, 2006, approximately 1,187,733 gallons of groundwater has been treated and discharged at the site. From January 11, 2006 (last reporting date) to April 7, 2006, approximately 86,995 gallons of treated groundwater was discharged into the site's sewer main.

The laboratory-reported effluent concentrations are shown in Table 1. The tabulated influent concentrations, as well as the mass removal rates, are shown in Table 2. Based on the analytical results, SOMA has remained in compliance with the discharge permit's requirements. The system was last sampled on April 7, 2006. The laboratory report from this sampling event is presented in Appendix B. The completed critical parameter report is also included in Appendix B.

If you have any questions or comments, please do not hesitate to call Mansour Sepehr or myself at (925) 734-6400.

Sincerely,

Clifford Perini

Senior Project Engineer

Clifford Peiner

Enclosures

cc: Mr. Michael M. Gholami

Figures

SOMA Environmental Engineering, Inc.







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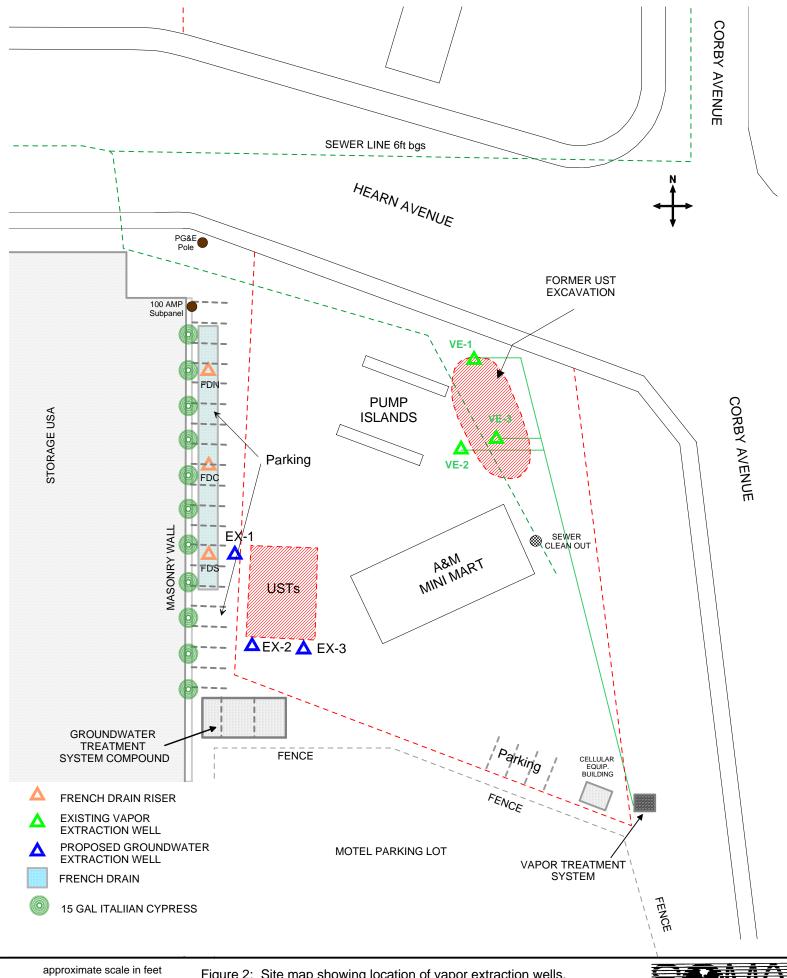


Figure 2: Site map showing location of vapor extraction wells, vapor treatment unit, and groundwater remedial system.

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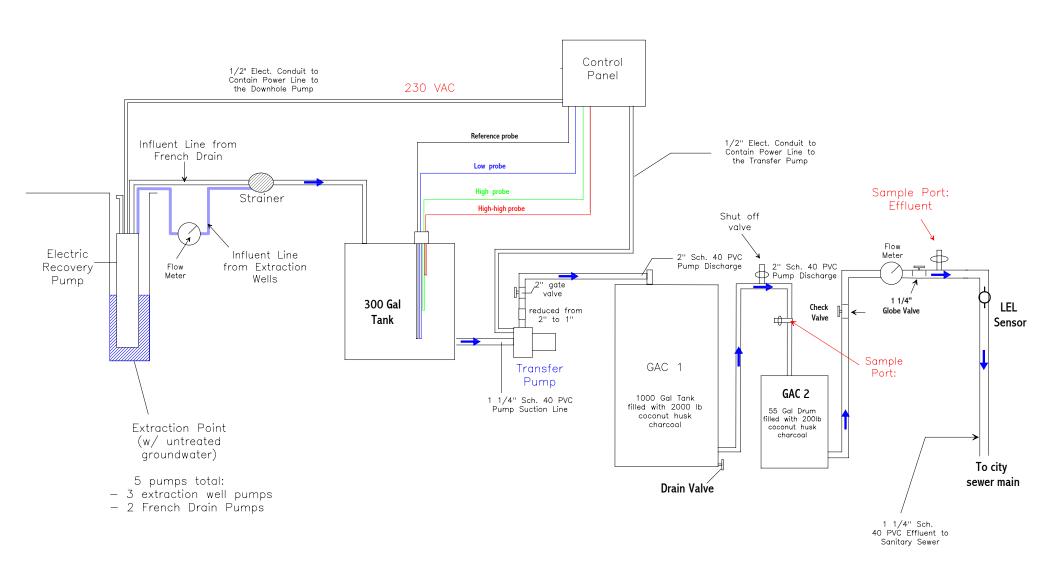


Figure 3: Schematic diagram of the groundwater treatment system. 440 Hearn Avenue, Santa Rosa, CA



Tables

Table 1
Total Volume of Treated Water, Historical Effluent Chemical
Analytical Results, and Operational History of Remediation System

	Volume	TPH-g	MtBE *	Benzene	Toluene	Ethylbenzene	Xylenes						
Date	(gallons)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)						
			20	05									
26-Jan-05	0	l:	nitial System	Start-up Da	te, began dis	scharging treate	d						
20-3411-03	O		g	roundwater t	o site sewer	main							
27-Jan-05	2,782	<50 <5.0 <5.0 <5.0 <5.0											
18-Feb-05		Flow meter was installed on influent line from extraction wells											
18-Feb-05	113,916	<200	1.38	<0.5	<0.5	<0.5	<1.0						
10-Mar-05	209,250	<200	<0.5	<0.5	<0.5	<0.5	<1.0						
07-Apr-05	327,150	<200	<0.5	<0.5	<0.5	<0.5	<0.5						
21-Apr-05	397,296	carbon cha	carbon change-out, replaced 1-55 gallon carbon drum, refurbished 2000 lb										
21-Api-03	337,230		carbon vessel										
11-May-05	555,219	<200	<0.5	<0.5	<0.5	<0.5	<0.5						
06-Jul-05	812,819	<200	<0.5	<0.5	<2.0	<0.5	<1.0						
23-Aug-05	940,878	carbon cha	inge-out, rep	laced 1-55 g	allon carbon	drum, refurbish	ed 2000 lb						
				carbo	on vessel								
03-Oct-05	1,013,800	<50	<0.5	<0.5	<2.0	<0.5	<1.0						
			20	06									
11-Jan-06	1,100,738	<50	<0.5	<0.5	<0.5	<0.5	<0.5						
29-Mar-06	1,176,026	C		, ,	0	lon carbon drum	,						
	1,,0,020		ref	urbished 200	00 lb carbon	vessel							
	4 400 000						4.0						
07-Apr-06	1,187,733	<50	<0.5	<0.5	<2.0	<0.5	<1.0						

Notes:

- . SOMA received approval from City of Santa Rosa Sanitary District to begin discharging the treated groundwater into the on-site sewer main. The GAC system was initially started on January 26, 2005.
- . TPH-d was analyzed during initial system start-up period, and was cancelled after one month of operation (2/18/05). Refer to First Quarter 2005 monitoring report for TPH-d results.
- *: Confirmed by EPA Method 8260B.

Table 2 Cumulative Mass of TPH-g, MtBE, & Benzene Removed from Groundwater Since Installation of Treatment System

A&M Mini-Mart 440 Hearn Avenue, Santa Rosa, CA

Date	Volume	Influen	t Concentratio	n (μg/L)	Mass	removed (por	unds)						
	(gallons)	TPH-g	MtBE	Benzene	TPH-g	MtBE	Benzene						
		In	itial System St	art-up									
26-Jan-05	0	Initial Syster	n Start-up Date	, began discharç	ging treated grou	undwater to site	sewer main						
27-Jan-05	2,782	4,300	290	1,100	0.10	0.01	0.03						
French drain influent													
2005													
18-Feb-05	0	5,160	293	1,450	NC	NC	NC						
10-Mar-05	12,434	43,400	122	3,010	4.49	0.01	0.31						
7-Apr-05	20,834	9,710	90.1	884	5.17	0.02	0.37						
11-May-05	24,293	35,600	80.3	2,120	6.20	0.02	0.43						
6-Jul-05	33,363	8,310	198	893	6.82	0.04	0.50						
3-Oct-05	43,484	1,310	278	628	6.94	0.06	0.55						
			2006				-						
11-Jan-06	46,258	1,100	71	180	6.96	0.06	0.56						
7-Apr-06	72,162	5,730 182 2,500 8.20 0.10											

		Ex	traction Well in	ıfluent									
	2005												
18-Feb-05	0	3,400	290	1,270	NC	NC	NC						
10-Mar-05	82,900	8,850	220	1,500	6.11	0.15	1.04						
7-Apr-05	192,400	3,740	187	1,350	9.52	0.32	2.27						
11-May-05	417,010	2,690	168	883	14.55	0.64	3.92						
6-Jul-05	665,540	31,100	114	1,490	78.90	0.87	7.00						
3-Oct-05	856,400	996	200	480	80.49	1.19	7.76						
			2006										
11-Jan-06	940,564	590	260	1,200	80.90	1.37	8.60						
7-Apr-06	1,002,374	235	313	698	81.02	1.53	8.96						

Table 2

Cumulative Mass of TPH-g, MtBE, & Benzene Removed from Groundwater Since Installation of Treatment System

A&M Mini-Mart 440 Hearn Avenue, Santa Rosa, CA

Date	Volume	Influen	t Concentratio	ո (μg/L)	Mass removed (pounds)				
	(gallons)	TPH-g	MtBE	Benzene	TPH-g	MtBE	Benzene		

Notes:

Mass of constituents removed from groundwater is calculated by the following equation

Mass removed= ((differential in gallons between events)*(3.78 liters/gallon)* influent conc.*(10^-6 g/ug)*(lbs/454 gram))+ previous mass removed reading

L: Lighter hydrocarbons contributed to the quantitation.

NA: Not Analyzed.

NC: Not calculated. During initial system start-up, sampling was based on overall influent concentrations from both the A-Zone and B1-Zone.

- Y: Sample exhibits chromatographic pattern which does not resemble standard.
- . SOMA received approval from City of Santa Rosa Sanitary District to begin discharging the treated groundwater into the on-site sewer main. The GAC system was initially started on January 26, 2005.
- . Flow meter was installed on influent line of extraction wells to onsite holding tank, on February 18, 2005, to monitor flow rate from extraction wells in B1-Zone. Meter was installed at 113,916 gallons.
- . Groundwater extracted from the French drain is in the more shallow A-Zone.
- Groundwater extracted from the wells is in the deeper B1-Zone.
- . TPH-d was analyzed during initial system start-up period, and was cancelled after one month of operation (2/18/05). Refer to First Quarter 2005 monitoring report for TPH-d results.
- . Total volume of extraction wells, read during onsite O&M events.
- . A new meter was installed on the influent line from the extraction wells to onsite holding tank on January 27, 2006.

A meter was installed on the influent line from the French drain to onsite holding tank on January 27, 2006.

These meters will be used for flow calculations for both the French drain & extraction wells

Appendix A

City of Santa Rosa Wastewater Discharge Permit Number SR-GW6493

CITY OF SANTA ROSA

Page 1 of 8

UTILITIE S DEPARTMENT
SUBREGIONAL WATER RECLAMATION SYSTEM
4300 Llano Road

Santa Rosa, CA 95407 707-543-3350 Fax: 707-543-3399

www.ci,santa-rosa.ca.us

PERMIT NUMBER

SR-GW6493

Company Name:

A & M MINI MART

Mailing Address:

440 Hearn Avenue

Santa Rosa, CA 95407

Facility Address:

440 Hearn Avenue

Santa Rosa, CA 95407

The above Industrial User is authorized to discharge industrial wastewater to the City's Most Current Sewer Code and/or Ordinance, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit is granted in accordance with the application filed on May 27, 2004, and in conformity with plans, specifications, and other data submitted to the City of Santa Rosa in support of the above application.

Effective date:

Expiration date:

septembe 10, 2009

PART I WASTEWATER DISCHARGE LIMITATIONS PER THE CITY'S MOST CURRENT SEWER CODE AND/OR ORDINANCE

PARAMETER .	EPA <u>METHODS</u>	MG/L <u>DAILY MAX</u>	SAMPLE TYPE
Antimony	EPA 200.7	153	Composite
Arsenic (T)	EPA 200.7	0.47	Composite
Beryllium	EPA 200.7	0.5	Composite
Cadmium	EPA 200.7	0.04	Composite
Chromium (6+)	EPA 7106A	0.1	Composite
Chromium (T)	EPA 7196A	1.71	Composite
Copper (T)	EPA 200.7	0.2	Composite
Cyanide	EPA 335.2	0:2	Grab
Lead (T)	EPA 200.7	0.3	Composite
Mercury	EPA 7470A	0.0003	Composite
Nickel (T)	EPA 200.7	1.51	Composite
Selenium	EPA 200.7	2.7	Composite
Silver (T)	EPA 200.8	M.P.**	Composite
Thallium	EPA 200.7	3.9	Composite
Zinc (T)	EPA 200.7	1.63	Composite
pH	EPA 150.1	6.0-9.5	Grab
Total Toxic Organics	EPA 624/625	2.13	Grab
Biochemical Oxygen Demand	SM 18 5210 B	20,400	Composite
Total Suspended Solids	SM 18 2540 D	9,800	Composite
Non-polar Grease	SM 18 5520 B	100	Grab
Polar Grease	SM 18 5520 B	150	Grab
Total Dissolved Solids	SM 18 2540 C	5,200	Composite
Total Kjeldah Nitrogen	SM 4500 Norg	2,600	Grab

Total Toxic Organics, or TTO is the summation of all quantifiable values greater than .01 mg/l for listed toxic organics.

The limits listed above will apply only when sampling occurs at the end of pipe which includes total facility effluent excluding domestic waste.

T = Total

MG/L = Milligrams per Liter

EPA = Environmental Protection Agency

SM = Standard Methods 18th Edition

PROHIBITIONS: Perchlorothylene/tetrachloroethylene is prohibited from being discharged to the sanitary sewer.

^{**} Allowable Industrial Load is allocated using the Mass Proportion Method, and thus, each Industrial User has a different limit.

PART I WASTEWATER DISCHARGE LIMITATIONS AND SELF MONITORING REQUIREMENTS

PARAMETER	DAILY MAX <u>MG/L</u>	SAMPLE TYPE	SAMPLE FREQUENCY
VOLATILE ORGANICS EPA 8260 B (1)	2.13	GRAB	DAILY
TOTAL PETROLEUM HYDROCARBONS-GAS	100.0	GRAB	DAILY

- (1) Summation of Volatile Organic Compounds (VOC) in concentrations greater than 0.01 mg/l.
- Sampling will be performed daily upon each start up of the groundwater treatment system to the samitary sewer.
 After proving compliance with discharge limitations sampling may be reduced to a quarterly basis.
- Sample location is the groundwater treatment system effluent.
- All analysis will be performed by a California State Certified Laboratory and all test procedures must comply
 with standards set forth in Title 40 Code of Federal Regulations, Part 136.
- 4. Self monitoring reports will be submitted to the Industrial Waste Section by the first of each month.
- Self monitoring results indicating noncompliance with any discharge limitation must be reported to this office immediately.
- Records of all self monitoring results must be maintained for the period specified in PART IV, Paragraph 5 of this permit. Such records will be subject to regular inspections by Industrial Waste Personnel.

GROUNDWATER.3A updated 12/00

PART II SPECIAL CONDITIONS/COMPLIANCE SCHEDULES GROUNDWATER REMEDIATION OPERATIONS

- 1. A & M MINI MART groundwater treatment system discharges to the sanitary sewer must comply with the City's Most Current Sewer Code and/or Ordinance limitations utilizing the Best Available Technology (BAT). See page 2.
- A & M MINI MART shall be required to perform self monitoring, see page 2a Analysis must in clude all
 constituents listed on page 2a and comply with sampling and analysis procedures found in Title 40 of
 the Code of Federal Regulations Part 136.
- --3. A & M MINI MART is required to install a Lower Explosive Limit (LEL) device at point of disch arge in such a manner as to shut down the treatment system if the LEL is exceeded. Flammables only.
 - 4. A & M MINI MART shall submit a \$150.00 fee to this office for the installation of a one inch flow metering device as per City of Santa Rosa Utilities Engineering standards on the treatment discharge line to the sanitary sewer. The flow meter will be installed by the City of Santa Rosa-Utilities prior to any discharge to sanitary sewer.
 - A & M MINI MART shall install sample points prior to and after groundwater treatment for monitoring accessibility.
 - A & M MINI MART shall maintain all groundwater treatment equipment in proper working condition as per manufacturer's specifications.
 - 7. Groundwater Discharge Permits will be issued for a period of five (5) calendar years. The City will notify the User ninety (90) days prior to the expiration of the User's permit and provide a new application form. Within thirty (30) days of notification the User is required to submit the completed application. The initial application fee and the five-year renewal fee are set at \$500.00. Additionally, a sewer use fee based according to latest City of Santa Rosa resolution, per thousand gallons will be assessed. Note: The current fee is \$4.12 and starting January 1, 2005 the fee will be \$4.49 per thousand gallons discharged to City's sanitary sewer system.
 - 8. An annual re certification statement will be mailed each calendar year ninety (90) days prior to December 31. The User must return the re certification statement prior to December 31 to the Industrial Waste Section, 4300 Liano Road, Santa Rosa, CA 95407. The Revenue and Collections Section of the City will issue and invoice for the recertification fee of \$50.00 in December of each year for the subsequent calendar year. This fee is payable to City of Santa Rosa and should be remitted to Revenue and Collections as stated on the invoice.
- Request for and receive prior approval before changing any process that would cause a change in flow, constituent characteristics, or strength of regulated process effluent.
- 10. A & M MINI MART shall be designated a Significant Industrial User if process discharge flow averages exceed 20,000 gallons per day, or the process discharges adversely affect the Subregional Reclamation operation or for violating any pretreatment standard or requirement in accordance 40 CFR403.8 (f)(6).

GROUNDWATER.PG4 revised 12/00

PART III REPORTING REQUIREMENTS

- 1. The Industrial User shall notify the City immediately upon any accidental or slug discharge to the sanitary sewer as outlined in the City's Most Current Sewer Code and/or Ordinance. Formal written notification discussing circumstances and remedies shall be submitted to the City within (5) five days of the occurrence.
- 2. Any upset experienced by the Industrial User of its treatment processes that places it in a temporary state of noncompliance with wastewater discharge limitations contained in this permit or other limitations specified in the City Sewer Code, Title 15 shall be reported to the City immediately. A detailed report shall be filed within (5) five days.
- 3. The Industrial User shall submit an Accidental Spill Prevention Plan to the City within 90 days of the issuance of this permit if such a plan has not been submitted and is required in Part II.
- 4. The Industrial User shall notify the City and apply for a revised permit prior to the introduction of new wastewater or pollutants or any substantial change in the volume or characteristics of the wastewater being introduced into the Publicly Owned Treatment Works (POTW) from the user's industrial processes.
- 5. The Industrial User shall conduct self-monitoring and reporting if such conditions are imposed initially or within the effective period of this permit. Monitoring shall be provided by the user at his expense, using a state-certified laboratory. The user's laboratory, where available, may be used if approved by the Engineer.
 - If results of any self-monitoring analysis indicates a violation, the Industrial User shall notify the City within 24 hours of becoming aware of the violation, resample and analyze for the parameters in the violation and submit, in writing, the results of the resample within 30 days.
- 6. The Industrial User shall agree to and proceed with a compliance schedule imposed initially and specified in Part II of this permit, or imposed within the effective period of this permit.
 - Not later than (14) fourteen days following each date in the compliance schedule, the Industrial User shall submit a progress report to the City. This report must indicate whether or not the increment of progress was met on the date, the reason(s) for any delay, and what steps are being taken by the User to return to the schedule established. In no event shall more than (9) nine months elapse between such progress reports to the City.

Within (90) days of the final compliance date specified in Part II of this permit, the Industrial User shall be required to submit a final compliance report. The industrial User shall be required to sample its wastewater for the pollutants specified in Part I, and report compliance. Any reasons for not complying and any steps taken by the User to comply shall be part of the report.

7. All reports shall be submitted to the following address:

SUBREGIONAL WATER MANAGEMENT SYSTEM INDUSTRIAL WASTE SECTION 4300 LLANO ROAD SANTA ROSA, CA 95407 (707) 543-3369

PART IV STANDARD CONDITIONS

- 1. The Industrial User shall comply with all general prohibitive discharge standards set forth in the City's Most Current Sewer Code and/or Ordinance, except as specifically permitted in Part I. However, no special agreement or arrangement between the City and any person or agency shall be all owed to contravene State or Federal standards or the City's technically based local limits.
- 2. The User shall not contribute the following substances to the POTW: (Section 403.5 National pretreatment standards: Prohibited discharges.)
 - (a)(1) General prohibitions. A User may not introduce into a POTW any pollutant(s) which cause Pass Through or Interference. These general prohibitions and the specific prohibitions in paragraph (b) of this section apply to each User introducing pollutants into a POTW whether or not the User is subject to other National Pretreatment Standards or any national, State, or local Pretreatment Requirements.
 - (2) Affirmative Defenses. A User shall have an affirmative defense in any action brought against it alleging a violation of the general prohibitions established in paragraph (a)(1) of this section and the specific prohibitions in paragraphs (b)(3), (b)(4), (b)(5), (b)(6), and (b)(7) of this section where the User can demonstrate that:
 - (i) It did not know or have reason to know that its Discharge, alone or in conjunction with a discharge or discharges from other sources, would cause Pass Through or Interference; and
 - (ii)(A) A local limit designed to prevent Pass Through and/or Interference, as the case may be, was developed in accordance with paragraph (c) of this section for each pollutant in the User's Discharge that caused Pass Through or Interference, and the User was in compliance with each such local limit directly prior to and during the Pass Through or Interference; or
 - (B) If a local limit designed to prevent Pass Through and/or Interference, as the case may be, has not been developed in accordance with paragraph (c) of this section for the pollutant(s) that caused the Pass Through or Interference, the User's Discharge directly prior to and during the Pass Through or Interference did not change substantially in nature or constituents from the User's prior discharge activity when the POTW was regularly in compliance with the POTW's NPDES permit requirements and, in the case of Interference, applicable requirements for sewage sludge use or disposal.
 - (b) Specific prohibitions. In addition the following pollutants shall not be introduced into a POTW:
 - (1) Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CF261.21.
 - (2) Pollutants which will cause corrosive structural damage to the POTW, but in no case Discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such Discharges;
 - (3) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in Interference;
 - (4) Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a Discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW.

PERMIT NO. SR-GW6493

- (5) Heat in amounts which will inhibit biological activity in the POTW resulting in Interference with the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40 C (104 F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits.
- (6) Petroleum oil, non biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
- (7) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
- (8) Any trucked or hauled pollutants, except at discharge points designated by the POTW.
- (9) Perchioroethylene / tetrachloroethylene is prohibited from being discharged to the sanitary sewer.

3. <u>LIABILITY</u>

The Industrial User will be held liable for any damage to the City's collection system and wastewater treatment plant resulting from unauthorized discharge into the District's sewers.

4. INSPECTION AND ENTRY

The Permittee shall allow the City of Santa Rosa, Industrial Waste Section, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor, for the purposes of assuring permit compliance, any substances or parameters at any location; and
- Inspect any production, manufacturing, fabricating, or storage area where pollutants,
 regulated under the permit, could originate, be stored, or be discharged to the sewer system.

RECORDS RETENTION

The Industrial User shall retain and preserve for no less than (3) three years, any records, books, documents, memoranda, reports correspondence and any and all summaries thereof, relating to monitoring, sampling and chemical analyses made by or in behalf of the User in connection with its discharge. All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City shall be retained and preserved by the Industrial User until all enforcement activities have concluded and all the periods of limitation with respect to any and all appeals have expired.

CONFIDENTIAL INFORMATION

Except for data determined to be confidential under City Sewer Code, Title 15, all reports r equired by this permit shall be available for public inspection at the Industrial Waste offices at 4300 Llano Road, Santa Rosa.

RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the Usex shall record the following information:

- The exact place, date and time of sampling;
- b. The dates the analyses were performed;
- c. The person(s) who performed the analyses;
- d. The analytical techniques or methods used; and
- e. The results of the required analyses.

8. DILUTION

No Industrial User shall increase the use of potable or process water or, in any way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

PROPER DISPOSAL OF PRETREATMENT SLUDGES AND SPENT CHEMICALS

The disposal of spent chemicals and sludges generated shall be done in accordance with Section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recover Act.

10. SIGNATORY REQUIREMENTS

All reports required by this permit shall be signed by a principal executive officer of the user or his/her designee.

11. REVOCATION OF PERMIT

The permit issued to the Industrial User by the City may be revoked when after inspection, monitoring and analysis it is determined that the discharge of wastewater to the sanitary sewer system is in violation of Federal, State or local laws, ordinances or regulations. Additionally, falsification or intentional misrepresentation of data or statements pertaining to the permit application or any other required reporting form, shall be cause for permanent revocation.

12. LIMITATION ON PERMIT TRANSFER

Wastewater discharge permits are issued to a specific user for a specific operation and are not assignable to another user or transferrable to any other location without the prior written approval of the City. Sale of a user shall obligate the purchaser to seek prior written approval of the City for the continued discharge to the sewer system.

13. FALSIFYING INFORMATION OR TAMPERING WITH MONITORING EQUIPMENT

Knowingly making any false statement on any report or document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under the criminal laws of the State, as well as in the imposition of civil penalties and relief.

14. MODIFICATION OR REVISION OF THE PERMIT

- a. The terms and conditions of this permit may be subject to modification by the City at any time as limitations or requirements as identified by the City's Most Current Sewer Co de and/or Ordinance, are modified or other just cause exists.
- b. This permit may also be modified to incorporate special conditions resulting from the issuance of a special order.
- c. The terms and conditions may be modified as a result of EPA promulgating a new federal pretreatment standard.
- d. Any permit modifications which result in new conditions in the permit shall include a reasonable time schedule for compliance if necessary.

15. DUTY TO REAPPLY

The City shall notify a User (90) ninety days prior to the expiration of the User's permit. Within (45) forty five days of the notification, the User shall reapply for reissuance of the permit on a form provided by the City.

SEVERABILITY

The provisions of this permit are severable, and if any of the provisions of this permit, or the application of any provisions of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

PROPERTY RIGHTS

The issuance of this permit does not convey any property rights in either real or personal property, or any other exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State, or local regulations.

18. VIOLATION - CIVIL PENALTY

Any person who violates any order issued by the engineer for violation of provisions of this title regulating or prohibiting discharge of wastewater which causes or threatens to cause a condition of contamination, pollution, or nuisance, as defined in Section 15-04.030, or as amended, may be liable civilly in a sum not to exceed Twenty-Five Thousand Dollars (\$25,000.00) for each day in which such violation occurs. (Ord. 2286 §1(part), 1983: prior code §20.70)

gw permits

Appendix B

Critical Parameter Report
and
Chain of Custody Form & Laboratory Report
for the
Groundwater Remediation System Samples

Report: CPR2OT

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Santa Rosa Subregional Wastewater Management System Industrial Wastewater Critical Parameters Report Form Self Monitoring Report - Due Apr2006

Run Date: 01Mar2006 Time: 21:00:59

PERMIT.: SR-GW6493

SIC...: 1381

LAST REPORTED SAMPLING: 11Jan2006 PERMIT EXPIRATION DATE: 09Sep2009

MAIL TO:

A & M MINI MART TONY PERINI 6620 OWENS DRIVE LOCATED AT:
A & M MINI MART
440 HEARN AVE

PLEASANTON, CA 94588 SAI

SANTA ROSA, CA 95407

Your critical Parameters (Self Monitoring) report is due in this office by the last day of Apr2006. The parameters noted below must be tested and the form completed and returned to the SANTA ROSA SUBREGIONAL WATER RECLAMATION SYSTEM, 4300 LLANO RD, SANTA ROSA, CA 95407. For more information regarding this report see the self monitoring page of your wastewater discharge permit and/or call 707-543-3369.

	<u> </u>		
CODE	 PARAMETER 	QUANTITY VALUES	
004	benzene	40.0005	mg/l
038	ethylbenzene	20.0005	mg/l
086	toluene *	40.0020	mg/l
130	xylene	20.0010	mg/l
245	total petroleum hydrocarbons-gas	20.050	mg/l

Report: CPR2OT ⊋Page: 2

Santa Rosa Subregional Wastewater Management System Industrial Wastewater Critical Parameters Report Form Self Monitoring Report - Due Apr2006 Run Date: 01Mar2006

Time: 21:00:59

1.	Report all critical parameters required by the Santa Rosa Wastewater Management	System.
	Test procedures must be in accordance with the standards set forth in 40 CFR	136 and
	amendments thereto. Results of analyses MUST be submitted to this office by the	last day
	of April, 2006. A signed laboratory analysis report MUST ACCOMPANY THIS	DOCUMENT.

2. All analyses must be performed by a laboratory certified by the State of California. Samples must be collected as specified on page 2 of your permit.

Brian TIMS (Print) Name of Person Collecting Sample. System Etfluent / 6At-1/ In FULENT EXTENSION WOL / 6Ab/ 1210/12:01 Paiffix Analytical Laboratory /851 West Mitouth Ave, Suite 2018, Alament, CA 74501 (Print) Name and Address of Laboratory Performing Analysis Labs. State Certification Number A & M.M.-Mart

(Print) Name of Company having Wastewater Discharge 440 Heam Amenue, Santa Rosa, Catifornia
(Print) Address of Wastewater Discharge I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. lansour

THIS DOCUMENT MUST BE SIGNED BY THE MOST RESPONSIBLE PERSON OF THE ORGANIZATION. INCLUDES THE OWNER, PRESIDENT, CORPORATE OFFICER, OR ANY OTHER REPRESENTATIVE OF THE ORGANIZATION IN A DECISION MAKING CAPACITY. THE PERSON SIGNING THIS DOCUMENT IS LEGALLY RESPONSIBLE FOR ALL INFORMATION CONTAINED HEREIN, AND BECOMES LIABLE FOR ANY AND ALL FUTURE ENFORCEMENT ACTIONS.

CHAIN OF CUSTODY FORM

Page ___ of____

PAL Pacific Analytical Laboratory 851 West Midway Ave., Suite 201B Alameda, CA 94501 510-864-0364 Telephone 510-864-0365 Fax

PAL Login# 604000Z

Proje	ect No: 2433			Sai	mple	er: [Brian	1	m.	5					-	Analyses/	Meth	od	
Proje	ct Name: 440 Hea	arn Ave., Sa	nta Rosa	Re	Report To: Tony Perini									В	98	80 B			
				Company: SOMA Environmental Engineering, Inc.								260	326	8260 list					
Turn	around Time: St	andard		Tel Fa:			5-734-6400 5-734-6401							TPH-g 8260B	MtBE 8	ethod			
	Sampling Date/Time			#		# of Containers						BTEX/MtBE 8260B	EPA Method 8 full two page I						
Lab No.	Sample ID	Date	Time	Soil	Water	Waste		нсг	H ₂ S04	HNO ₃	ICE	Fie	eld Notes						
	Eff-water	4/7/06	12:00 P, m		*		4-VOAs	*			*	Gra	b Sample	*		*	4		70
	GAC-1	4/7/00	12:10 P.M		*		3-VOAs	*			*	Gra	b Sample	*	*				
	Influent FD	4/7/04	12:20 7.m		*		3-VOAs	*			*	Gra	b Sample	*	*				
	Influent EX	4/7/06	12:25?m		*		3-VOAs	*			*	Gra	b Sample	*	*				
Sam	pler Remarks:						Relinquis	hed	by:		Dat	e/Time:	Received by:			Date	/Tim	e:	
	Output required page list should	include MtBl	E and BTEX	ζ,			Bois	4/2/	1:10	10 P	sı d	1/7/06 1:10 pm.	Received by: Dariel Folt 7	-		4-3	7-0 10p	6 n	
Efflu	ent sample only																		

20 April 2006

Mansour Sepehr SOMA Environmental Engineering Inc. 6620 Owens Drive, Suite A Pleasanton, CA 94588

RE: 440 Hearn Ave., Santa Rosa

Work Order Number: 6040002

Mapad Ach

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,

Maiid Akhavan

Laboratory Director



6620 Owens Drive, Suite AProject Number: 2433Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr20-Apr-06 10:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Eff-water	6040002-01	Water	07-Apr-06 12:00	07-Apr-06 14:15
GAC-1	6040002-02	Water	07-Apr-06 12:10	07-Apr-06 14:15
Influent FD	6040002-03	Water	07-Apr-06 12:20	07-Apr-06 14:15
Influent EX	6040002-04	Water	07-Apr-06 12:25	07-Apr-06 14:15



6620 Owens Drive, Suite AProject Number: 2433Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr20-Apr-06 10:05

Volatile Organic Compounds by EPA Method 8260B Pacific Analytical Laboratory

	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Eff-water (6040002-01) Water	Sampled: 07-Apr-06 12:00	Received: 07-Ap	or-06 14:15						
1,1,1,2-Tetrachloroethane	ND	2.00	ug/l	1	BD61001	07-Apr-06	07-Apr-06	EPA 8260B	
1,1,1-Trichloroethane	ND	0.500	"	"	"	"	"	"	
1,1,2,2-Tetrachloorethane	ND	2.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.00	"	"	"	"	"	"	
1,1,2-Trichloroethene	ND	0.500	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.500	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.500	"	"	"	"	"	"	
TBA	5.87	2.50	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	2.00	"	"	"	"	"	"	
1,2-Dibromo-3-Chloropropane	ND	2.00	"	"	"	"	"	"	
1,2-Dibromoethan	ND	2.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.500	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.500	"	"	"	"	"	"	
1,3-dichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,3-dichloropropane	ND	0.500	"	"	"	"	"	"	
1,4-Dichlorbenzene	ND	0.500	"	"	"	"	"	"	
2,2-Dichloropropane	ND	2.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.500	"	"	"	"	"	n .	
2-nitropropane	ND	2.00	"	"	"	"	"	n .	
4-Chlorotoluene	ND	0.500	"	"	"	"	"	n	
4-Isopropyltoluene	ND	0.500	"	"	"	"	"	n .	
ACETONE	ND	5.00	"	"	"	"	"	n .	
Acetonitrile	ND	0.500	"	"	"	"	"	n .	
Alylchloride	ND	2.50	"	"	"	"	"	n .	
Benzene	ND	0.500	"	"	"	"	"	"	
Bromobenzene	ND	0.500	"	"	"	"	"	"	
Bromochloromethane	ND	0.500	"	"	"	"	"	"	
Bromoform	ND	5.00	"	"	"	"	"	"	

Pacific Analytical Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



6620 Owens Drive, Suite AProject Number: 2433Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr20-Apr-06 10:05

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Eff-water (6040002-01) Water Butan-2-one(MEK)	Sampled: 07 Apr 06 12:00		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Butan-2-one(MEK)	Sampled: 07-Ap1-00 12.00	Received: 07-Ap	or-06 14:15						
Butaii-2-one(WILK)	ND	2.00	ug/l	1	BD61001	07-Apr-06	07-Apr-06	EPA 8260B	
Carbon bisulfide	ND	0.500	"	"	"	"	"	"	
Chlorobenzene	ND	2.00	"	"	"	"	"	"	
Chloroform	ND	0.500	"	"	"	"	"	"	
Chloroprene	ND	0.500	"	"	"	"	"	"	
cis-1,2 dichloroethene	ND	0.500	"	"	"	"	"	"	
cis-1,3-Dichloro-1-Propene	ND	0.500	"	"	"	"	"	"	
CIS-1,4-Dichloro-2-butene	ND	2.50	"	"	"	"	"	"	
Dibromochloromethane	ND	2.00	"	"	"	"	"	"	
Diethylether	1.27	0.500	"	"	"	"	"	"	
Ethyl methacrylate	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Freon 113	ND	0.500	"	"	"	"	"	"	
Hexachloro-1,3-Butadiene	ND	2.00	"	"	"	"	"	"	
Idomethane	ND	2.00	"	"	"	"	"	"	
Isopropylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
Methylene dichloride	ND	10.0	"	"	"	"	"	"	
Naphthene	ND	0.500	"	"	"	"	"	"	
n-Butylbenzene	ND	0.500	"	"	"	"	"	"	
n-Propylbenzene	ND	0.500	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Pentachloroethane	ND	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.500	"	"	"	"	"	"	
Styrene	ND	2.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.500	"	"	"	"	"	"	
Tetrachlorocarbon	ND	0.500	"	"	"	"	"	"	
Tetrachloroethene	ND	0.500	"	"	"	"	"	"	
Tetrahydrofuran	ND	5.00	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
trans-1,4-Dichloro-2-butene	ND	2.50	"	"	"	"	"	"	
Trans-Di-1,2-Chloroethylene	ND	0.500	"	"	"	"	"	"	
Methyl isobutyl ketone	ND	0.500	"	"	"	"	"	"	
Chloromethane	ND	0.500	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
Nitrobenzene	ND	10.0	"	"	"	"	"	"	

Pacific Analytical Laboratory

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6620 Owens Drive, Suite AProject Number: 2433Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr20-Apr-06 10:05

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
	ed: 07-Apr-06 12:00					·x····			
Vinyl chloride	ND	0.500	ug/l	1	BD61001	07-Apr-06	07-Apr-06	EPA 8260B	
Bromodichloromethane	ND	0.500	"	"	"	"	"	"	
Dibromomethane	ND	0.500	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	2.00	"	"	"	"	"	"	
Vinyl acetate	ND	2.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	2.00	"	"	"	"	"	"	
Chloroethane	ND	0.500	"	"	"	"	"	"	
DIPE	ND	0.500	"	"	"	"	"	"	
1,1-dichloropropene	ND	0.500	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	2.00	"	"	"	"	"	"	
trans-1,3-Dichloro-1-Propene	ND	0.500	"	"	"	"	"	"	
2-Hexanone	ND	2.00	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.2 %	70-1.	30	"	"	"	"	
Surrogate: Dibromofluoromethane		110 %	70-1.	30	"	"	"	"	
Surrogate: Perdeuterotoluene		109 %	70-1.	30	"	"	"	"	
Gasoline (C6-C12)	ND	50.0	"	"	"	"	"	EPA 8015M	
GAC-1 (6040002-02) Water Sampled:	07-Apr-06 12:10 R	eceived: 07-Apr-	06 14:15						
Gasoline (C6-C12)	ND	50.0	ug/l	1	BD61001	07-Apr-06	07-Apr-06	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.0 %	70-1.	30	"	"	"	"	
Surrogate: Dibromofluoromethane		102.07	70.1	20	,,	"	"	"	
Surrogate: Dibromojiuoromethane		102 %	70-1.	30					



6620 Owens Drive, Suite AProject Number: 2433Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr20-Apr-06 10:05

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Influent FD (6040002-03RE1) Water	Sampled: 07-Apr-06 12:20	Received	: 07-Apr-06	14:15					
Gasoline (C6-C12)	5730	550	ug/l	11	BD61001	07-Apr-06	10-Apr-06	EPA 8260B	
Benzene	2500	5.50	"	"	"	"	"	"	
Ethylbenzene	612	5.50	"	"	"	"	"	"	
m&p-Xylene	122	11.0	"	"	"	"	"	"	
o-xylene	173	5.50	"	"	"	"	"	"	
Toluene	60.4	22.0	"	"	"	"	"	"	
MTBE	182	5.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	70-13	80	"	"	"	"	
Surrogate: Dibromofluoromethane		101 %	70-13	80	"	"	"	"	
Surrogate: Perdeuterotoluene		103 %	70-13	80	"	"	"	"	
Influent EX (6040002-04) Water Sa	mpled: 07-Apr-06 12:25 Rec	ceived: 07-	Apr-06 14:1	.5					
Gasoline (C6-C12)	235	215	ug/l	4.3	BD61001	07-Apr-06	07-Apr-06	EPA 8260B	
Benzene	698	2.15	"	"	"	"	"	"	
Ethylbenzene	12.0	2.15	"	"	"	"	"	"	
m&p-Xylene	9.14	4.30	"	"	"	"	"	"	
o-xylene	10.1	2.15	"	"	"	"	"	"	
Toluene	10.3	8.60	"	"	"	"	"	"	
MTBE	313	2.15	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	70-13	80	"	"	"	"	
Surrogate: Dibromofluoromethane		99.8 %	70-13	80	"	"	"	"	
Surrogate: Perdeuterotoluene		98.8 %	70-13	80	"	"	"	"	



6620 Owens Drive, Suite AProject Number: 2433Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr20-Apr-06 10:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BD61001 - EPA 5030 Water MS

Blank (BD61001-BLK1)		Prepared & Analyzed: 10-Apr-06									
Surrogate: 4-Bromofluorobenzene	50.8		ug/l	50.0	102	70-130					
Surrogate: 4-Bromofluorobenzene	50.8		"	50.0	102	70-130					
Surrogate: Dibromofluoromethane	49.2		"	50.0	98.4	70-130					
Surrogate: Dibromofluoromethane	49.2		"	50.0	98.4	70-130					
Surrogate: Perdeuterotoluene	51.4		"	50.0	103	70-130					
Surrogate: Perdeuterotoluene	51.4		"	50.0	103	70-130					
1,1,1,2-Tetrachloroethane	ND	2.00	"								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloorethane	ND	2.00	"								
1,1,2-Trichloroethane	ND	2.00	"								
1,1,2-Trichloroethene	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethene	ND	0.500	"								
ETBE	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
Gasoline (C6-C12)	ND	50.0	"								
TBA	ND	2.50	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	2.00	"								
1,2-Dibromo-3-Chloropropane	ND	2.00	"								
1,2-Dibromoethan	ND	2.00	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-dichloroethane	ND	0.500	"								
Ethanol	ND	1000	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-dichlorobenzene	ND	0.500	"								
1,3-dichloropropane	ND	0.500	"								
1,4-Dichlorbenzene	ND	0.500	"								
2,2-Dichloropropane	ND	2.00	"								
2-Chlorotoluene	ND	0.500	"								
2-nitropropane	ND	2.00	"								
4-Chlorotoluene	ND	0.500	"								
4-Isopropyltoluene	ND	0.500	"								
ACETONE	ND	5.00	"								

Pacific Analytical Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



6620 Owens Drive, Suite AProject Number: 2433Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr20-Apr-06 10:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BD61001 - EPA 5030 Water MS

Alytchloride ND 2.50 " Bernzene ND 0.500 " Bromobenzene ND 0.500 " Chloroform ND 0.500 " Chl	Blank (BD61001-BLK1)				Prepared & Analyzed: 10-Apr-06
No.	Acetonitrile	ND	0.500	ug/l	
Benzene ND 0.500 * Bromocheznene ND 0.500 * Bromochormethane ND 0.500 * Bromochormethane ND 5.00 * Bromoform ND 5.00 * Chlorobenzene ND 0.500 * Chloroform ND 0.500 * Chloroform ND 0.500 * Chloroforme ND 0.500 * Chloroformehore ND 0.500 * cis-1,2 dichloro-1-Propene ND 0.500 * Cis-1,4-Dichloro-2-butene ND 0.500 * Dichlyelher ND 0.500 * Ethlylbenzene ND 0.500 *	Alylchloride	ND	2.50	"	
Bromobenzee ND 0.500 * Bromothoromethane ND 0.500 * Butan-2-one(MEK) ND 2.00 * Butan-2-one(MEK) ND 0.500 * Carbon bisulfide ND 0.500 * Chloroform ND 0.500 * Chloroform ND 0.500 * Chloropene ND 0.500 * sis-1,3-Dichloro-1-Propene ND 0.500 * CIS-1,4-Dichloro-2-butene ND 0.500 * Dicthylether ND 0.500 * Eithylenbacrylate ND 0.500 * Eithylbenzene ND 0.500 * Bopropylbenzene ND 0.500 * <td>Benzene</td> <td>ND</td> <td>0.500</td> <td>"</td> <td></td>	Benzene	ND	0.500	"	
Bromochloromethane ND 0.500 " Bromoform ND 5.00 " Bromoform ND 5.00 " Brunar-2-one (MEK) ND 0.500 " Chlorobersen ND 2.00 " Chloroberne ND 0.500 " Chloropere ND 0.500 " Cis-1,4-Dichlor-1-Propene ND 0.500 " Dibromochloromethane ND 0.500 " Dibromochloromethane ND 0.500 " Ethly benzene ND 0.500 " Hexachloro-1,3-Butadiene ND 0.500 " Mobrey-Yalene ND 0.500 " Merby-Yalene ND 0.500 "	Benzene	ND	0.500	"	
Bromoform ND 5.00 " Butan-2-one (MEK) ND 2.00 " Carbon bisulfide ND 0.500 " Chloroform ND 0.500 " Chloroform ND 0.500 " Chloroforme ND 0.500 " Chloroforene ND 0.500 " Sis-1,3-Dichloro-1-Propene ND 0.500 " CIS-1,4-Dichloro-2-butene ND 2.50 " Dictry mechacylate ND 0.500 " Eithylenezee ND 0.500 " Eithylbenzene ND 0.500 " Freon 113 ND 0.500 " Freon 124 ND 0.500 " Freon 125 ND 0.500 " Freon 126 ND 0.500 " Freon 127 ND 0.500 " Glower Park ND 0.500 " Methylene	Bromobenzene	ND	0.500	"	
Butan-2-one (MEK) ND 2.00 " Carbon bisulfide ND 0.500 " Chloroscane ND 2.00 " Chlorosprene ND 0.500 " Chloroprene ND 0.500 " cis-1,3-Dishloro-1-Propene ND 0.500 " CIS-1,4-Dishloro-2-butene ND 0.500 " Dibromokhoromethane ND 2.00 " Eithylenzene ND 0.500 " Eithylenzene ND 0.500 " Freon 113 ND 0.500 " Freon 124 ND 0.500 " Freon 113 ND 0.500 " Freon 113 ND 0.500 " Freon 113 ND 0.500 " Freon 114 ND 0.500 " Freon 115 ND 0.500 " Rescription-1, ND 0.500 " Respreyation-2, ND	Bromochloromethane	ND	0.500	"	
Carbon bisulfide ND 0.500 " Chlorobernee ND 2.00 " Chloroform ND 0.500 " Chloroforme ND 0.500 " cis-1,2 dichloroethene ND 0.500 " cis-1,3-Dichloro-1-Propene ND 0.500 " Dibromochloromethane ND 2.00 " Eithylether ND 0.500 " Eithylethacylate ND 0.500 " Eithylbenzene ND 0.500 " Eithylbenzene ND 0.500 " Eithylbenzene ND 0.500 " Hexachloro-1,3-Butadiene ND 0.500 " Idomethane ND 0.500 " Isopropylbenzene ND 0.500 " Methylene dichloride ND 1.00 " Methylene dichloride ND 0.500 " N-Paylbenzene ND 0.500	Bromoform	ND	5.00	"	
Chlorobenzene ND 2.00 " Chlorobrem ND 0.500 " Chloroprene ND 0.500 " cis-1, 2 dichlorothene ND 0.500 " cis-1, 3-Dichloro-1-Propene ND 0.500 " Clbry-Inchloro-2-butene ND 0.500 " Dibromochloromethane ND 0.500 " Ethylenerlen ND 0.500 " Ethylbenzene ND 0.500 " Ethylbenzene ND 0.500 " Ethylbenzene ND 0.500 " Hecachloro-1,3-Butadiene ND 0.500 " Idemethane ND 0.500 " Methylene dichloride ND 1.00 " Methylene dichloride ND 0.500 " Methylene dichloride ND 0.500 " Naphthene ND 0.500 " Propylbenzene ND 0.500	Butan-2-one(MEK)	ND	2.00	"	
Chloroform ND 0.500 " Chloroforme ND 0.500 " cis-1,3-Dichloro-1-Propene ND 0.500 " CIS-1,4-Dichloro-2-butene ND 0.500 " Dibromochloromethane ND 0.500 " Dictylether ND 0.500 " Eithyl methacrylate ND 0.500 " Eithylbenzene ND 0.500 " Eithylbenzene ND 0.500 " Feren 113 ND 0.500 " Hexachloro-1,3-Butadiene ND 0.500 " Idomethane ND 0.500 " Roportyplenzene ND 0.500 " mötep-Xylene ND 1.00 " Methylene dichloride ND 1.00 " Methylene dichloride ND 0.500 " n-Propylbenzene ND 0.500 " n-Pulylbenzene ND 0.500	Carbon bisulfide	ND	0.500	"	
Chloroprene ND 0.500 " cis-1,2 dichloroethene ND 0.500 " cis-1,3-Dichloro-1-Propene ND 0.500 " CibS1,4-Dichloro-2-butene ND 2.50 " Dibromochloromethane ND 2.00 " Diethylether ND 0.500 " Eithylbenzene ND 0.500 " Eithylbenzene ND 0.500 " Freon 113 ND 0.500 " Hexachloro-1,3-Butadiene ND 2.00 " Idomethane ND 2.00 " stepropylbenzene ND 0.500 " m&p-Xylene ND 1.00 " m&p-Xylene ND 1.00 " m&p-Xylene ND 0.500 " m-Propylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " n-Propylbenzene ND 0.500 "	Chlorobenzene	ND	2.00	"	
cis-1,2 dichloroethene ND 0.500 " cis-1,3-Dichloro-1-Propene ND 0.500 " CIS-1,4-Dichloro-2-butene ND 0.500 " Dichtynoethloromethane ND 0.500 " Eithyl methacrylate ND 0.500 " Eithyl benzene ND 0.500 " Eithylbenzene ND 0.500 " Freon 113 ND 0.500 " Hexachloro-1,3-Butadiene ND 0.500 " ddomethane ND 2.00 " stopropylbenzene ND 0.500 " m&p-Xylene ND 1.00 " m&p-Xylene ND 1.00 " Methylene dichloride ND 0.500 " Naphthene ND 0.500 " n-Propylbenzene ND 0.500 " o-xylene ND 0.500 " Pertachloroethane ND 0.500	Chloroform	ND	0.500	"	
Sis-1,3-Dichloro-1-Propene ND 0.500 " CIS-1,4-Dichloro-2-butene ND 2.50 " CIS-1,4-Dichloro-2-butene ND 2.50 " CIS-1,4-Dichloro-2-butene ND 0.500 " CIS-1,4-Dichloro-dichromethane ND 0.500 " CIS-1,4-Dichlor	Chloroprene	ND	0.500	"	
CIS-1,4-Dichloro-2-butene	cis-1,2 dichloroethene	ND	0.500	"	
Distromochloromethane ND 2.00 " Diethylether ND 0.500 " Eithyl benzene ND 0.500 " Eithyl benzene ND 0.500 " Eithyl benzene ND 0.500 " Freon 113 ND 0.500 " Hexachloro-1,3-Butadiene ND 2.00 " Idomethane ND 0.500 " Isopropylbenzene ND 0.500 " m&p-Xylene ND 1.00 " Methylene dichloride ND 1.00 " Naphthene ND 0.500 " n-Butylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " p-vaylene ND 0.500 "	cis-1,3-Dichloro-1-Propene	ND	0.500	"	
Diethylether ND 0.500 " Ethyl methacrylate ND 0.500 " Ethylbenzene ND 0.500 " Ethylbenzene ND 0.500 " Freon I13 ND 0.500 " Hexachloro-1,3-Butadiene ND 2.00 " Idomethane ND 2.00 " Isopropylbenzene ND 0.500 " m&p-Xylene ND 1.00 " m&p-Xylene ND 1.00 " Methylene dichloride ND 1.00 " Naphthene ND 0.500 " n-Propylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " o-xylene ND 0.500 " o-xylene ND 0.500 " o-xylene ND 0.500 " o-xylene ND 0.500 " pentachloroethane	CIS-1,4-Dichloro-2-butene	ND	2.50	"	
Ethyl methacrylate ND 0.500 " Ethylbenzene ND 0.500 " Ethylbenzene ND 0.500 " Freon 113 ND 0.500 " Hexachloro-1,3-Butadiene ND 2.00 " Idomethane ND 2.00 " Isopropylbenzene ND 0.500 " m&p-Xylene ND 1.00 " Methylene dichloride ND 1.00 " Naphthene ND 0.500 " n-Brypylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " n-Pettachloroethane ND 0.500 " Pentachloroethane ND 0.500 " Styrene ND 0.500 "	Dibromochloromethane	ND	2.00	"	
Ethylbenzene ND 0.500 " Ethylbenzene ND 0.500 " Freon 113 ND 0.500 " Hexachloro-1,3-Butadiene ND 2.00 " Idomethane ND 2.00 " Isopropylbenzene ND 0.500 " m&p-Xylene ND 1.00 " m&p-Xylene ND 1.00 " Methylene dichloride ND 1.00 " Naphthene ND 0.500 " n-Butylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " o-xylene ND 0.500 " o-xylene ND 0.500 " Pentachloroethane ND 0.500 " sec-Butylbenzene ND 0.500 " Styrene ND 0.500 "	Diethylether	ND	0.500	"	
Ethylbenzene ND 0.500 " Freon 113 ND 0.500 " Hexachloro-1,3-Butadiene ND 2.00 " Idomethane ND 0.500 " Isopropylbenzene ND 0.500 " Image-Xylene ND 1.00 " Methylene dichloride ND 10.0 " Methylene dichloride ND 10.0 " In-Butylbenzene ND 0.500 " In-Propylbenzene ND 0.500 " In-Propylben	Ethyl methacrylate	ND	0.500	"	
Fron 113 ND 0.500 " Hexachloro-1,3-Butadiene ND 2.00 " Idomethane ND 2.00 " Isopropylbenzene ND 0.500 " Imexp-Xylene ND 1.00 " Methylene dichloride ND 10.0 " Naphthene ND 0.500 " n-Butylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " o-xylene ND 0.500 " o-xylene ND 0.500 " Pentachloroethane ND 0.500 " Styrene ND 0.500 "	Ethylbenzene	ND	0.500	"	
Hexachloro-1,3-Butadiene ND 2.00 " Idomethane ND 0.500 " Isopropylbenzene ND 0.500 " Im&p-Xylene ND 1.00 " Im&p-Xylene ND 1.00 " Immediate or in the state of th	Ethylbenzene	ND	0.500	"	
Idomethane ND 2.00 " Isopropylbenzene ND 0.500 " m&p-Xylene ND 1.00 " m&p-Xylene ND 10.0 " Methylene dichloride ND 0.500 " Naphthene ND 0.500 " n-Butylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " o-xylene ND 0.500 " Pentachloroethane ND 1.00 " Sec-Butylbenzene ND 0.500 " Styrene ND 0.500 "	Freon 113	ND	0.500	"	
Suppropylbenzene ND 0.500 " m&p-Xylene ND 1.00 " m&p-Xylene ND 1.00 " Methylene dichloride ND 10.0 " Maphthene ND 0.500 " m-Butylbenzene ND 0.500 " m-Propylbenzene MD 0.500	Hexachloro-1,3-Butadiene	ND	2.00	"	
m&p-Xylene ND 1.00 " m&p-Xylene ND 1.00 " Methylene dichloride ND 10.0 " Naphthene ND 0.500 " n-Butylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " o-xylene ND 0.500 " Pentachloroethane ND 1.00 " Ster-Butylbenzene ND 0.500 " Styrene ND 2.00 "	Idomethane	ND	2.00	"	
m&p-Xylene ND 1.00 " Methylene dichloride ND 10.0 " Naphthene ND 0.500 " n-Butylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " o-xylene ND 0.500 " Pentachloroethane ND 1.00 " Stere-Butylbenzene ND 0.500 " Styrene ND 2.00 "	Isopropylbenzene	ND	0.500	"	
Methylene dichloride ND 10.0 " Naphthene ND 0.500 " n-Butylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " o-xylene ND 0.500 " Pentachloroethane ND 1.00 " sec-Butylbenzene ND 0.500 " Styrene ND 2.00 "	m&p-Xylene	ND	1.00	"	
Naphthene ND 0.500 " n-Butylbenzene ND 0.500 " n-Propylbenzene ND 0.500 " o-xylene ND 0.500 " Pentachloroethane ND 1.00 " sec-Butylbenzene ND 0.500 " Styrene ND 2.00 "	m&p-Xylene	ND	1.00	"	
n-Butylbenzene	Methylene dichloride	ND	10.0	"	
ND	Naphthene	ND	0.500	"	
ND 0.500 " o-xylene ND 0.500 " Pentachloroethane ND 1.00 " sec-Butylbenzene ND 0.500 " Styrene ND 2.00 "	n-Butylbenzene	ND	0.500	"	
Do-xylene ND 0.500 " Pentachloroethane ND 1.00 " sec-Butylbenzene ND 0.500 " Styrene ND 2.00 "	n-Propylbenzene	ND	0.500	"	
Pentachloroethane ND 1.00 " sec-Butylbenzene ND 0.500 " Styrene ND 2.00 "	o-xylene	ND	0.500	"	
Pentachloroethane ND 1.00 " sec-Butylbenzene ND 0.500 " Styrene ND 2.00 "	o-xylene	ND	0.500	"	
Styrene ND 2.00 "	Pentachloroethane	ND	1.00	"	
Styrene ND 2.00 "	sec-Butylbenzene	ND	0.500	"	
ert-Butylbenzene ND 0.500 "	Styrene	ND	2.00	"	
	tert-Butylbenzene	ND	0.500	"	

Pacific Analytical Laboratory

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6620 Owens Drive, Suite AProject Number: 2433Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr20-Apr-06 10:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
•										

Batch BD61001 - EPA 5030 Water MS

Blank (BD61001-BLK1)				Prepared & Analyzed: 10-Apr-06
Tetrachlorocarbon	ND	0.500	ug/l	
Tetrachloroethene	ND	0.500	"	
Tetrahydrofuran	ND	5.00	"	
Toluene	ND	2.00	"	
Toluene	ND	2.00	"	
MTBE	ND	0.500	"	
MTBE	ND	0.500	"	
trans-1,4-Dichloro-2-butene	ND	2.50	"	
Trans-Di-1,2-Chloroethylene	ND	0.500	"	
Methyl isobutyl ketone	ND	0.500	"	
Chloromethane	ND	0.500	"	
Bromomethane	ND	2.00	"	
Nitrobenzene	ND	10.0	"	
Vinyl chloride	ND	0.500	"	
Bromodichloromethane	ND	0.500	"	
Dibromomethane	ND	0.500	"	
Dichlorodifluoromethane	ND	2.00	"	
Vinyl acetate	2.02	2.00	"	A-01
Trichlorofluoromethane	ND	2.00	"	
Chloroethane	ND	0.500	"	
DIPE	ND	0.500	"	
1,1-dichloropropene	ND	0.500	"	
1,2,3-Trichloropropane	ND	2.00	"	
trans-1,3-Dichloro-1-Propene	ND	0.500	"	
2-Hexanone	ND	2.00	"	
TAME	ND	2.00	"	
Gasoline (C6-C12)	ND	50.0	"	



RPD

%REC

SOMA Environmental Engineering Inc. Project: 440 Hearn Ave., Santa Rosa

6620 Owens Drive, Suite AProject Number: 2433Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr20-Apr-06 10:05

Reporting

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

Spike

Source

		Reporting		Spike	Source		%KEC		KPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch BD61001 - EPA 5030 Water MS										
LCS (BD61001-BS1)				Prepared &	Analyzed:	10-Apr-06				
Surrogate: 4-Bromofluorobenzene	51.4		ug/l	50.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	51.4		"	50.0		103	70-130			
Surrogate: Dibromofluoromethane	47.7		"	50.0		95.4	70-130			
Surrogate: Dibromofluoromethane	47.7		"	50.0		95.4	70-130			
Surrogate: Perdeuterotoluene	50.1		"	50.0		100	70-130			
Surrogate: Perdeuterotoluene	50.1		"	50.0		100	70-130			
1,1,2-Trichloroethene	136	0.500	"	100		136	70-130			A-0
1,1-Dichloroethane	83.9	0.500	"	100		83.9	70-130			
1,1-Dichloroethene	97.7	0.500	"	100		97.7	70-130			
TBA	580	2.50	"	500		116	70-130			
Gasoline (C6-C12)	2400	50.0	"	2000		120	70-130			
1,2-dichloroethane	104	0.500	"	100		104	70-130			
Benzene	108	0.500	"	100		108	70-130			
Benzene	108	0.500	"	100		108	70-130			
Chlorobenzene	104	2.00	"	100		104	70-130			
Chloroform	97.8	0.500	"	100		97.8	70-130			
Tetrachloroethene	114	0.500	"	100		114	70-130			
Toluene	113	2.00	"	100		113	70-130			
Toluene	113	2.00	"	100		113	70-130			
MTBE	103	0.500	"	100		103	70-130			
MTBE	103	0.500	"	100		103	70-130			
Gasoline (C6-C12)	2400	50.0	"	2000		120	70-130			
LCS Dup (BD61001-BSD1)				Prepared &	Analyzed:	10-Apr-06				
Surrogate: 4-Bromofluorobenzene	52.3		ug/l	50.0		105	70-130			
Surrogate: 4-Bromofluorobenzene	52.3		"	50.0		105	70-130			
Surrogate: Dibromofluoromethane	46.7		"	50.0		93.4	70-130			
Surrogate: Dibromofluoromethane	46.7		"	50.0		93.4	70-130			
Surrogate: Perdeuterotoluene	48.4		"	50.0		96.8	70-130			
Surrogate: Perdeuterotoluene	48.4		"	50.0		96.8	70-130			
1,1,2-Trichloroethene	135	0.500	"	100		135	70-130	0.738	20	A-0
1,1-Dichloroethane	95.6	0.500	"	100		95.6	70-130	13.0	20	
1,1-Dichloroethene	104	0.500	"	100		104	70-130	6.25	20	
Gasoline (C6-C12)	2280	50.0	"	2000		114	70-130	5.13	20	
TBA	592	2.50	"	500		118	70-130	2.05	20	
1,2-dichloroethane	103	0.500	"	100		103	70-130	0.966	20	

Pacific Analytical Laboratory

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6620 Owens Drive, Suite AProject Number: 2433Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr20-Apr-06 10:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BD61001 - EPA 5030 Water MS										
LCS Dup (BD61001-BSD1)				Prepared &	Analyzed:	10-Apr-06				
Benzene	109	0.500	ug/l	100		109	70-130	0.922	20	
Benzene	109	0.500	"	100		109	70-130	0.922	20	
Chlorobenzene	112	2.00	"	100		112	70-130	7.41	20	
Chloroform	98.2	0.500	"	100		98.2	70-130	0.408	20	
Tetrachloroethene	107	0.500	"	100		107	70-130	6.33	20	
Toluene	112	2.00	"	100		112	70-130	0.889	20	
Toluene	112	2.00	"	100		112	70-130	0.889	20	
MTBE	101	0.500	"	100		101	70-130	1.96	20	
MTBE	101	0.500	"	100		101	70-130	1.96	20	
Gasoline (C6-C12)	2280	50.0	"	2000		114	70-130	5.13	20	



6620 Owens Drive, Suite AProject Number: 2433Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr20-Apr-06 10:05

Notes and Definitions

A-01 Analyte recovery exceeded QC limits; however, this analyte was not found to be present in any of the samples.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

File :C:\MSDChem\1\DATA\2006-Apr-07-1404.b\07040602.D

Operator :

Acquired : 7 Apr 2006 2:58 pm using AcqMethod OXY21506.M

Instrument : PAL GCMS Sample Name: BD61001-BLK1

Misc Info : Vial Number: 2



File :C:\MSDChem\1\DATA\2006-Apr-07-1404.b\07040603.D

Operator

Acquired : 7 Apr 2006 3:30 pm using AcqMethod OXY21506.M

Instrument : PAL GCMS

Sample Name: BD61001-BS1@voc

Misc Info : Vial Number: 3



File :C:\MSDChem\1\DATA\2006-Apr-07-1404.b\07040606.D

Operator

Acquired : 7 Apr 2006 5:16 pm using AcqMethod OXY21506.M

Instrument : PAL GCMS

Sample Name: BD61001-BS1@gas

Misc Info : Vial Number: 6

